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I.

INFLUENCE OF THE CLIMATE OF ST. AUGUSTINE, FLORIDA, ON PULMONARY AFFECTIONS.

By JOHN C. WARREN, M.D., Professor of Anatomy and Surgery in Harvard University.

To the Rev. Dr. Porter, Theological Seminary, Andover.

DEAR SIR,—Having learned that the state of your health caused you to visit St. Augustine, in Florida, I beg leave to propose some questions in regard to the influence of the climate of that place on pulmonary affections. Physicians in this vicinity are often much at a loss, in deciding between the climates of Havana, St. Croix, and other places in the south, which may, on the whole, be preferable. I would, therefore, beg leave to avail myself of your personal experience on this subject, for my own benefit and that of others, in asking your opinion as to the climate of St. Augustine generally, and as to some particular points, which I will state :—

1. What is the common temperature of St. Augustine in the winter and spring months ?
2. The range of the thermometer in these months ?
3. The fluctuations of the thermometer as to their suddenness ?
4. The degree of humidity of the atmosphere ?

5. The frequency of cloudy, rainy, and of clear weather ?

6. The predominant winds, and whether they blow over sea or land ?

7. The character of the surrounding country—especially as to collections of fresh water, and slow streams of water ?

Generally, whether you consider that climate favorable to pulmonary complaints, and to any other chronic affections ?

The accommodations for the sick, and whether there is a physician residing there ?

The population of the place. Its supply of articles of food, especially vegetables and fruits ?

I am aware that it may not be in your power to answer all of these questions fully ; but any information you can give respecting them will be valuable to the public, and will confer a favor on,

Your very respectful friend and servant, JOHN C. WARREN.

Boston, Sept. 8th, 1830.

To J. C. Warren, M.D., Professor of Anatomy and Surgery in Harvard University, Boston.

My dear Sir,—I regret that urgent official engagements, incident to the close of our academical year, have unavoidably delayed, till this time, my reply to your inquiries respecting St. Augustine. I well know the sacrifices and solicitude of an invalid, compelled to seek

refuge from the northern winter ; and am aware that, for the coming season, not a few, in these trying circumstances, must speedily make up their decision on a question deeply interesting to themselves and their friends. I know, too, from personal experience, and from the testimony of eminent physicians, in Europe and in this country, that the choice of a proper residence for pulmonary invalids, in winter, is a subject environed with difficulties ; and that these difficulties are most felt by those gentlemen, in your profession, who are most frequently called upon to give advice in these cases. The personal obligations which I have long been under to yourself, and the slightest hope that any advantage may accrue to others who need your professional advice, induce me most cheerfully to answer the inquiries of your letter in the best manner I am able.

I enclose to you an abstract from the meteorological diary kept at the military post in St. Augustine, which I procured in anticipation that I might apply it to some useful purpose. This abstract, which was obligingly made for me by A. Anderson, M.D., I presume is accurate, with the exception perhaps of one or two mistakes, which I suspect were made in transcribing the figures ; and this alone is a better answer to some of your questions than any other I could give.

To the first and second questions, this table, I presume, furnishes an adequate reply. During the fifty months for which it was kept, including four winters, the thermometer in no case sunk below 42 deg. of Fahrenheit,—except that in 1829, the coldest winter perhaps ever known at St.

Augustine, it sunk once, in January, to 28 deg. ; in February, to 30 deg. ; and, in March, to 36 deg. The same temperature is denoted by vegetation as by the thermometer. The tropical products, such as sugar-cane, figs, and oranges, grow there in perfection, and garden vegetables thrive during the winter months.

As to *suddenness of fluctuation* in the thermometer, the monthly mean temperature of the table shows that the climate is much more equable than can be found anywhere north of Florida. Instead of the violent transitions of 30 degrees in 24 hours, which are not very uncommon in New England, and even in South Carolina, it is rare that a change of 10 degrees in the same day occurs in St. Augustine.

As to *humidity* of the atmosphere, I cannot answer with as much precision as I could wish, having seen no barometrical observations. The soil, being sandy and calcareous, is remarkably absorbent ; so that after the heaviest shower, within an hour, perhaps, there is no appearance of water in the streets. The air is certainly not as dry as that of our elevated grounds in New England, during the driest parts of our winter or summer ; but the dampness that does exist with us is much more deleterious to health. In St. Augustine, it is common for ladies to sit or walk in the evening air, without any covering to their heads, and yet without harm. This is probably owing to the fact, that the dampness is much like that on ship-board in the gulf-stream, which passes near the shore of Florida, and renders its air mild, equable, and tonic. The consequence is, that what we mean by

influenza is almost unknown there, and *common colds* are very harmless, generally passing off in a short time.

Besides the answer to the fifth inquiry contained in the table, I add, that, in distinction from our northern latitudes, as well as those of the West Indies, St. Augustine has no *long storms*, and no *rainy season*. Sometimes it has a violent storm of 24 or 30 hours, but rain generally falls in *showers*, succeeded by fine, fair weather. I have not found any meteorological tables by which I could satisfactorily compare the climate of the West Indies, or Italy, or the south of France, with that of St. Augustine, as to the number of fair days in a month. As to our own country, the only document to which I have access, of sufficient extent and accuracy to be relied on, is a register of weather, kept for 25 years, at and near New Haven, Conn. This gives an average, for the whole time, of about thirteen fair days in a month; whereas the average at St. Augustine appears to be about twenty-two. And were the comparison limited to the worst months in our climate, it would be much more encouraging to the migration of northern invalids. For example, according to the St. Augustine table, the number of clear days in March, as given for different years, is thus—24, 27, 20, 27; whereas, according to the New Haven Register, in three out of four successive years, March had but eleven fair days, and twelve in the other.

The *predominant winds* are from some point of *east*,—and, coming from the main ocean across the gulf-stream, possess a vitality, and a genial softness, very exhilarating to the invalid. There are, howe-

ver, occasional seasons of sharpness, rendering a little seclusion among the orange groves, better than lodgings immediately on the shore.

The *surrounding region*, on the land side, is flat, but sandy. No marshes or stagnant streams are sufficiently near to vitiate the air of the city; yet I observed that when the wind blows from west or southwest, delicate people are more indisposed than when it blows from the eastward.

For *pulmonary complaints*, where there is no fixed organic disease, I think the climate eminently favorable. I think so, because I have seen its favorable influence in many cases, and have heard of it in many others. But if disease of lungs has made such progress that change of structure is begun, a more interior and less tonic air, I presume, would generally be better. The air of the city, however, has proved remarkably restorative in some cases of apparently regular consumption. In cases of dyspepsia, and other chronic affections, all the advantages may be expected here, that may be looked for anywhere, from a mild, pure, elastic atmosphere.

The *want of good accommodations*, particularly rooms for the sick, has heretofore been a subject of much complaint. This inconvenience was seriously felt the last winter, especially after the number of stranger invalids increased from sixty to eighty; and these from nearly every State, from Georgia to Canada. The houses are mostly in the Spanish style, old and uninviting. The spirit of building and repairing, however, which prevailed last season, will provide very comfortable lodgings, I presume, the coming

winter, for most who shall need them. The want of fire-places has begun to be remedied, in the more ancient rooms, by the introduction of stoves. There is no deficiency as to medical advice, several respectable physicians residing in the city; one of whom, Dr. Anderson, has had much experience, in New York, as physician to the "Infirmity for diseases of Lungs," and who has exchanged his residence for the benefit of Mrs. Anderson's health.

The population of the place has been estimated sometimes at two thousand, and sometimes at three thousand five hundred. The returns of the late census I have not seen.

My own restricted habits as to diet, render me incompetent to judge how far men who are fond of *free living* would be satisfied at St. Augustine. I heard some complaining, but remembered that invalids from home are often querulous, and oftener still injudicious as to the variety and richness of food which they demand. Bacon, poultry, pigeons, venison, excellent fresh fish, sweet potatoes and other garden vegetables, may be had in sufficient quantities. I saw no reason for complaining as to food, except that milk is inferior and rather scarce. The water too is inferior, though not unhealthy. The principal fruit is the sweet orange, which grows in abundance, and in the highest perfection. The price of board is about a dollar a day, and washing fifty cents a dozen.

The actual health of St. Augustine speaks much for its climate. In nearly three centuries, since its settlement, it is said but one instance of malignant fever has been known; and that is as-

cribed to the indiscretion of the Americans, on the transfer of the country to the United States. The present American population comprises a number of very respectable families, which are constantly increasing. A Catholic, a Presbyterian, and a Methodist church, are erected, and one for Episcopal worship is in contemplation.

But for incessant interruptions in writing the above statement, it would have been more valuable both for exactness and brevity. Probably the interior of Cuba or Santa Cruz may have some advantages, as a winter climate, over Florida; yet, after thorough inquiry, and having been once at Havanna myself, I preferred St. Augustine: because its language and government are those of my own country; because its facilities of intercourse with one's friends, by water and by mails, are a great convenience; and because it is easy of access, compared with any foreign residence. My passage was five days from New York to Charleston, and thence to St. Augustine twenty-five hours; returning to Charleston, two days. Three good packets ply between the two cities; the passage varies with the weather, from one to four and even six days.

I will close this long communication, by hinting at several mistakes which I have observed to be often committed by those who travel for pulmonary complaints.

1. Deferring a change of climate till organic disease has fixed on the lungs, and then with glimmering hopes, and at immense sacrifices of comfort, migrating southward only to expire among

strangers. Several persons who died last winter, soon after their arrival in Florida, might have lived longer, probably, though under the sufferings of a hopeless malady, amid the comforts of a northern home.

2. Going southward only a few degrees of latitude, and stopping to winter amidst rain, and sleet, and mud. In my opinion, it is better to remain on a steady *terra firma* of frost, with a dry atmosphere, or to go beyond frost.

3. Going to the *sea-coast* of the southern States. The up-country of South Carolina and Georgia, except in rainy seasons, presents a fine winter climate to the northern invalid, if he is properly careful to guard against violent transitions of temperature. But it is a great mistake to suppose that the corresponding latitudes on the *sea-coast*, because warmer, must be more favorable to diseased lungs. This delicate organ, when predisposed to irritation, is certainly injured by the great *humidity* of what southern physicians often term the *malaria* country of the south. Charleston, for example, besides other and great attractions to strangers which it possesses, has an excellent climate for good constitutions, but is by no means a proper residence for consumptive persons. The same thing is true, probably to a smaller extent, of Savannah, and, to a considerably greater, of New Orleans.

With great respect, I am, dear sir, yours, &c. E. PORTER.

P. S.—Of St. Mary's, which is about seventy miles north of St. Augustine, I have no personal knowledge; but have been informed, on good authority, that its climate is nearly as good as

that of St. Augustine, and its accommodations better.

Theological Seminary, Andover, October, 1830.

Saturday Morning, Oct. 3d.

Dear Sir,—I send this the first moment I could find to prepare it. If you think proper to publish it, as your note intimates, I have no objection, especially as it may save me a particular answer to some scores of inquiries. In that view I return your own letter, as you may have no copy.

Yours, &c. E. PORTER.

The following is an extract from a meteorological diary, kept at the hospital department of the United States' army at St. Augustine, made by Dr. Anderson.

The observations were made daily at 7, A.M., 2, P. M., and 9, P. M. The mean temperature is made from the general diary.

The foregoing epistles, with the table which will be found on our next page, were published in the last number of the *American Journal of Medical Sciences*, and will be deemed authentic and valuable records on a subject of deep interest to the faculty and the community. Many months ago, we published a communication on the same subject by Dr. Anderson, who is referred to by Dr. Porter, and whose statements are confirmed by the observations of the gentleman last named. Should the hopes thus raised of the salutary influence of the climate of St. Augustine, in those disorders which are the bane of our northern latitudes, be fully realized, one of the greatest objections to travelling, in such cases, will be removed.

Diary.

Months.	Highest.	Lowest.	Mean Temperature.			Winds.	Number of Fair days.
			7 A.M.	2 P.M.	9 P.M.		
1825.							
August	94°	80°	82°	83°	85°	S. W.	19
September	87	76	75	80	76	N. E.	14
October	86	58	76	86	80	N. E.	22
November	76	53	62	69	65	N. E.	20
December	76	42	60	75	52	N. E.	26
1826.							
January	68	44	52	55	54	N. E.	19
February	77	52	60	79	65	N. E.	17
March	80	62	66	71	70	S. E.	24
April	84	60	72	85	83	S. W.	24
May	82	74	77	80	67	S. W.	27
June	88	80	81	81	81	N. E.	22
July	92	80	80	86	83	N. E.	21
August	90	76	81	84	80	N. E.	18
September	89	73	77	78	80	N. E.	21
October	83	61	70	96	64	S. E.	24
November	80	52	60	64	70	N. W.	15
1827.							
April	86	66	68	71	66	S. E.	21
May	85	64	72	77	72	S. E.	20
June	91	72	75	80	76	S. E.	23
July	93	78	82	86	82	S. E.	14
August	91	75	81	83	82	S. E.	25
September	96	75	70	80	71	N. E.	16
October	86	60	70	76	67	N. E.	23
November	76	48	58	68	63	N. W.	21
December	76	44	66	67	62	S. E.	21
1828.							
January	83	46	63	70	66	S. E.	18
February	84	52	67	70	61	S. E.	19
March	82	50	52	63	61	S. E.	27
April	84	50	66	72	58	N. E.	24
May	90	71	74	76	74	S. E.	24
June	80	74	79	84	80	S. E.	14
July	90	76	68	75	71	S. E.	15
August	87	77	80	84	95	S. E.	13
September	85	70	77	82	79	S. E.	14
October	80	60	69	75	69	N. E.	15
November	81	53	60	69	64	S. E.	24
December	78	61	60	70	64	S. E.	13
1829.							
January	68	28	53	65	56	N. W.	24
February	77	30	53	60	52	N. E.	13
March	76	36	53	64	56	N. W.	20
April	74	52	61	70	66	S. E.	27
May	82	63	67	76	62	S. E.	9
June	94	70	77	84	80	S. W.	18
July	89	75	78	84	83	S. E.	14
August	91	76	81	85	83	S. E.	23
September	86	72	77	82	78	N. E.	15
1830.							
January	68	46	56	61	59	N. E.	27
February	76	46	57	63	58	N. E.	23
March	80	50	62	68	65	S. W.	27

II.

POISONOUS GASES.

Case of Death from inhaling Nitrous Ether Vapor.

From the Midland Med. and Surg. Reporter.

On the 31st of March, an inquest, of an interesting nature, was held on the body of Elizabeth Stevens, at the house of Mr. Thomas, druggist, Hay, Breconshire, before the coroner, C. Ekins, Esq. The deceased lived in the service of Mr. Thomas, and went to bed in perfect health the night previously; but did not rise at her usual hour in the morning, in consequence of which, one of the family went to call her, but found the door fastened, which being broken open, she was found dead, lying on her right side, with the arms folded across the breast as in profound sleep, and the features not at all disturbed.

Medical assistance was immediately procured; and as the material facts of the case were given by the medical attendants, before the jury, we shall give the result of their examination, and make such remarks as the circumstances seem to call for.

Richard Proctor, surgeon, being duly sworn, stated that he, jointly with Mr. Hathaway and Mr. Henry Proctor, opened the body of the deceased, and found the coat of the stomach of the deceased a little inflamed, with a small quantity of fluid in it, not exceeding one ounce; there did not appear to be any gritty substance in the stomach. The intestines leading from the stomach appeared turgid. On further examination, the uterus appeared enlarged, and its outer coat highly vascular. On its being opened, it was found to contain a male

fœtus, indicating that she had been pregnant about three months. Witness further stated that he saw the deceased soon after the body was discovered, and remarked that a large jar, containing upwards of three gallons of spirits of nitrous ether, was broken, and the contents spilt about the room; and the room being small, and the atmosphere being highly impregnated by the said spirit, witness was of opinion that it was sufficient to have caused the death of the deceased.

Mr. Henry Proctor stated that he was present at the examination of the deceased, and concurred with the former witness in his opinion as to the cause of death.

Mr. Nicholas Hathaway, surgeon, stated that he was present at the examination of the deceased, and found the stomach and uterus in the state described by the first witness. He was further of opinion, that the impure atmosphere of the room, caused by the evaporation of so large a quantity of spirits, may have produced death, as the lungs were found in such a high state of congestion, as to prevent the passage of air through their cells. The witness could not account for the inflamed state of the stomach.

The verdict of the jury was, that the deceased died in consequence of the effluvia arising from the nitric ether, as described by the evidence.

Observations.—It is much to be regretted that in this very rare, and, we believe we may say, unparalleled occurrence, the examination of the body was confined to ascertaining the state of the lungs and stomach. The condition of the brain, the heart, and

of the whole alimentary canal; the state of the blood, and also the appearances of the surface of the body, should undoubtedly have been mentioned, not only with a view of answering the great ends of the inquiry for which the jury was summoned, but also to throw light upon an important toxicological investigation.

There can, however, be no doubt, that the state of the body in this instance, so far as the examination of the lungs was carried, corresponded with the morbid appearances left in the body after poisoning by carbonic acid gas. Dr. Schenck, medical inspector of Siegen, in reporting two cases of death caused by the vapors of burning wood, notices paleness of the countenance as a singular accompaniment of cerebral congestion; and calls the attention of medical jurists to the extreme calmness of the features as a general character of this variety of poisoning. The lungs, too, in all these cases, are distended with black fluid blood; but in addition to this, according to Portal, the vessels of the brain are gorged, and the ventricles contain serum.*

In Wildberg's collection of cases, there is a report on two people who were suffocated in bed, in consequence of the servant having neglected to open the flue trap when she kindled the stove in the bed-chamber; and in each of them Wildberg found all the appearances described by Portal. Mertzdorff has related a case of death from the cause, in which, together with the preceding appearances, an effusion of blood was found between the arachnoid and pia mater, over the

whole surface of both hemispheres.*

We cannot, for a moment, hesitate in believing that the spirit of nitrous ether is capable of producing, when inhaled largely, fatal consequences; as its vapor is known to exert all the influence of a powerful narcotic poison upon the system; and we have recently heard of an instance where sulphuric ether—whose action is said to be less powerful—being inhaled by a stout man, produced nearly fatal consequences. In this instance, the young man, by breathing for some time the vapor of sulphuric ether, fell into an insensible state, and remained almost apoplectic for some hours, and doubtless would have died had he not been removed from the situation in which he was inhaling the poisonous gas. As, however, the coexistence of inflamed stomach and pregnancy, in the case under consideration, was a circumstance in itself likely to raise suspicions as to the manner in which the deceased came by her death, it became the more necessary for the medical witnesses to show, 1st, that in every particular disclosed by a careful examination of every part of the body, the truth of their evidence was borne out by the investigations of previous examples where poisonous gases had occasioned death; and, 2dly, that no morbid traces were discoverable, which indicated that any narcotic, or other poison, had been swallowed.

We may here hazard an opinion we have long held, that the inquest system of this country does not work well. Had such a case

* See Dr. Christison on Poisons, p. 602.

* Consult Dr. Christison on Poisons, p. 603.

as the foregoing occurred amongst our continental neighbors, a full and minute report would have been made of all the particulars connected with it; and nothing would have been left to conjecture, which a patient chemical and anatomical investigation could have disclosed. To the neglect, in this country, of this kind of medico-legal investigation, may be attributed the meagre reference to works in our own language on these important topics; whilst our neighbors, both in France and Germany, have succeeded in collecting together a large store of materials, the fruits of long-continued labor, and indefatigable research. At this time, when our legal institutions are undergoing a strict scrutiny, which, in some instances, has led to wholesome reform, it is well worthy the consideration of our enlightened statesmen and lawyers, whether some material improvement might not be effected in the mode of conducting inquiries before the coroner.

III.

CASE OF DIVISION OF THE RIGHT CAROTID ARTERY, SUCCESSFULLY TREATED.*

To Dr. C. Hastings.

SIR,—I have the honor to acknowledge the receipt of yours of the 28th ult., and feel great pleasure in transmitting the particulars of the case you allude to, for insertion in your valuable publication.

A poor man, named James Hancock, æt. 24, resident in this neighborhood, having been engaged and detected in an intrigue

of gallantry, labored under depression of spirits, and thrice attempted suicide by hanging,—in consequence of which, fears were entertained by his family that he would again resort to some mode of self-destruction, and probably a more effectual one. On the evening of the 18th of May last, the man borrowed a razor from a neighbor, for the purpose, he alleged, of shaving himself. His parents, having received information of this, watched him the more closely, and observed him going into an adjacent apartment, where he put his intentions into execution; but his courage failing him, he immediately ran into the room where the family were, pressing with all his might on the bleeding vessel.

This occurred about eight o'clock, P. M., and happening to be at a house within a few yards, I was with him instantly, and found he had made *two* incisions, in a transverse direction, the one about half an inch above the other; the uppermost and first incision extended from the left side of the throat, over the *pomum adami*, for about two inches; and the other, about three inches in length, cutting deeply into the trachea, and terminating immediately after dividing the right carotid artery and jugular vein: the artery was bleeding profusely, and the stream of blood was of about the circumference of a swan shot. I lost no time in securing the artery by means of a ligature, although it had receded considerably under the integuments. About a *minute and a half only* had elapsed betwixt the perpetration of the desperate act, and the securing of the artery. Nevertheless, the hemorrhage was excessive, and

* From the same.

in this short space of time, an amazing quantity of blood was lost. The man was now apparently dying; his respiration laborious and protracted; eyes glazed; pulse nearly imperceptible, and a cold diaphoresis exuded all over the surface of the body. I immediately exhibited diffusible stimuli; had his feet put in warm water, and used all means possible to produce reanimation. When vitality was again manifest, I with great difficulty applied sutures to the incisions, owing to the hacked and ragged state of the parts. Having, at length, succeeded, and applied adhesive straps, I discovered venous blood oozing from the right jugular vein—I imagined—but it soon ceased. I ordered him weak brandy and water at intervals, and as soon as possible removed him to bed, taking care to secure his head from falling back, and so tearing the wounds asunder. I visited him at half-past ten again, and found him rather feverish, at the same time very weak. Discontinued the brandy and water, and, as his bowels had not been moved for two days, administered olei ricini 3vi., and gave a mixture of tincture of henbane and camphor julep every three hours.

I saw my patient at ten o'clock on the following morning, when he complained of pain in the head and drowsiness. The bowels had been freely open; tongue enveloped in a white coat; pulse weak and quick; considerable pain in the larynx and summit of the trachea; the wounded parts highly inflamed; deglutition extremely difficult; feet and legs cold as death, to which were applied heated bricks; and I ordered an antiphlogistic lotion to the throat

externally, composed of tincture of opium, acetate of lead, and water.

I now began to fear that his constitution would not recover from the shock it had sustained, and, as he was gradually becoming more debilitated, I exhibited, every hour and a half, ether, laudanum, and camphor julep; and occasionally sago, with a little sherry in it. He now began to recover strength, and at four, P. M., I found him much better, and the pain completely removed from his head. A glow of heat diffused throughout the system, and pulse considerably elevated and more full. Discontinued the draught, and, from that time, gave him saline medicines principally, with calomel and opium at bedtime occasionally.

On the 20th I removed the dressings, and found the parts in a most healthy condition, and generating a "laudable pus," the inflammatory symptoms having considerably abated. The proper dressings, and the application of the above lotion occasionally, together with a proper attention to regimen in diet, exercise, &c., produced a salutary effect, and the man is now perfectly recovered, owing his life entirely to the immediate assistance rendered; and I have no doubt but that, in half a minute longer, he would have died from loss of blood. He is, however, now quite well, retaining the cicatrix as the only visible demonstration of his imprudence, and, as it were, showing a conspicuous beacon in warning any who may have been inclined to follow his course, to avoid the shoals of dishonor and profligacy, which are the too frequent instigators of the act.

I am, Sir, with much respect,
Yours, most obediently and obliged,
C. B. GARRETT.

IV.

CASE IN WHICH A LARGE DOSE OF TINCTURE OF FOXGLOVE REMAINED AN HOUR IN THE STOMACH.

Communicated for the Boston Med. and Surg.
Journal,

By CHANDLER ROBBINS, M.D.

It was in the forenoon that I prescribed half an ounce of the Tincture of Foxglove, for a patient in Sea Street—directing him to take fifteen drops twice a day. He procured the medicine of Mr. White, one of our best apothecaries, and took the first dose as directed. In a short time it produced an uncomfortable degree of dizziness, attended by pallor of the countenance, so that he concluded he would take but ten drops in the evening. Before the evening came, however, at about 2 o'clock, P. M., an acquaintance of this man, becoming exasperated, by some circumstances unimportant to the case, seized the phial of Tincture of Foxglove, and, supposing it to be laudanum,

placed it to his lips and—by way of revenge, I presume—swallowed the whole, before any of the bystanders had time to interfere.

My patient came to me in great agitation, supposing that if so small a quantity was so efficacious on himself, the remainder must be fatal to his friend, and requested my attendance. At a quarter before 3, a drachm of sulphate of zinc was administered, which operated well at 3. The same dose was then repeated with effect; and a large portion of castor oil terminated the treatment.

It is not a little remarkable, that although half an ounce of the tincture—less than 15 drops—was an hour in this man's stomach, the frequency of his pulse was not affected, the pupils in no degree dilated, he confessed no vertigo, nor any other symptom which could be attributed to the Foxglove.—The entire impunity with which he retained it so long, must be attributed to peculiarity of constitution, his habit of excessive indulgence in the use of intoxicating liquors, or the violent spirit of revenge which had possession of him at the time.

BOSTON, TUESDAY, DECEMBER 21, 1830.

FATAL EFFECTS OF THE ADMISSION OF AIR INTO THE VEINS DURING CERTAIN OPERATIONS.

THE occasional sudden and unexpected occurrence of death, during surgical operations on the neck, from the admission of air into the heart and large vessels by the mouths of divided veins, is a circumstance with which most operators are more fa-

miliar than they are with the true cause of such admission. A very rational and philosophical explanation of this occurrence, has been recently offered by M. Berard, in the *Archives Générales de Médecine*.

The difficulty with all previous attempts to account for the events in question, has been, that they have either failed to assign a sufficient

cause, or have attributed them to one which, if true, would render such consequence of operation more common than it is. The ingenious M. Berard has avoided both these extremes.

It is generally believed, at the present day, that the heart exercises on the contents of the veins a suction-power during inspiration. The coats of the veins being perfectly soft and flaccid, it might be supposed that the pressure of the external air would, immediately on the division of a vein, produce a perfect collapse of the extremity next the heart, and that this collapse would reach so far as the inlet of the nearest branch, and so be an entire protection against the intrusion of atmospheric air. This is unquestionably the process to which the surgeon owes the security against instant death, in most of his operations where large vessels are divided.

M. B. remarks that, in certain cases, the coats of the large veins are not left to collapse by the atmospheric pressure on their external surfaces, but are attached to the adjacent parts, so as to be kept always distended; and that this mechanism is necessary, in order to enable them to sustain their calibre during inspiration. When, therefore, a large vein is severed at a point so near such attachment as to prevent the collapse of its coats, the air gains admission, passes on to the heart, and produces the fatal result referred to: whilst the division of veins at points remote from such attachment, is not succeeded by any such intrusion.

Such a structure as the above exists, as has been long known, in the sinuses of the brain, in the ramifications of the hepatic veins, and in the inferior cava, at its passage through the diaphragm. M. B. calls the attention of the faculty to a like organization in other parts of the venous system. "The entrance of the superior vena cava into the right auricle of the heart, is kept in a state of constant tension by the prolongation over it of the strong fibrous covering of the pericardium; and the subclavian veins, the junction of the jugulars with these veins, as also the whole course of the axillary veins, from the *scalen*i muscles to the armpit, are maintained in a similar state, by being attached to various aponeurotic membranes at the root of the neck. Hence, if the superior cava, subclavian, axillary, or commencement of the jugular veins, be divided, they do not collapse as other veins do, but remain gaping, unless they are detached from the texture by which they are kept distended, and then they collapse like veins generally. Were it not for this organization, it is obvious that the suction-power of inspiration, even of the powerful kind which is admitted by some physiologists, could have little or no effect in moving the blood towards the heart along the superior cava. But the chief veins being kept in a state of distension, and so enabled to resist the compressing tendency of atmospheric pressure, the pumping or inspiring power of inspiration becomes effective; and it is particularly worthy of remark, that as the aponeurotic mem-

branes to which the veins are attached extend from bones to bones, and are most stretched during the expansion of the chest,—it is during the act of inspiration that the veins are most extended. The same organization will, also, for the same reason, account for the entrance of air into the heart, from wounds of the veins at the root of the neck, during surgical operations. If the subclavian or commencement of the jugular vein is opened, air will enter to a certainty, unless immediate precautions be taken to exclude it; and as for the same accident occurring when more distant veins are opened, it will be found, we doubt not, to arise from the divided vein having acquired, from connexion with diseased parts, an organization similar to that possessed by the subclavian and axillary veins in their natural state." The importance of these facts in the practical operations of the surgeon, entitle them to great regard, and the subject is one which we hope to see pursued at greater length and more in detail.

NEW AND VALUABLE TREATISE ON
FEVER.

WE are happy to announce the republication, by those enterprising publishers Messrs. Carey & Lea, of Philadelphia, of a most interesting Treatise on Fever, by Southwood Smith, M.D., Physician to the London Fever Hospital. Wherever this work has found its way, it has met with great approbation, and thrown much light on a very common, but yet intricate and difficult subject.

Dr. Johnson, Editor of the *Medico-Chirurgical Review*, who is more given to pungency of satire than fulsomeness of praise, says of this work—"It is the best we have ever perused on the subject of fever,—and, in our conscience, we believe it is the best that ever flowed from the pen of physician in any age or in any country."

RECENT FAILURES WITH THE HY-
DRIODATE OF POTASS.

THE recent failures of success in the medical use of this article being much more numerous than the faculty had a right to expect from the terms in which it was originally recommended, suspicions were excited in the minds of some English physicians that the article, like most others, had been dishonestly prepared. Investigations were set on foot by different chemists, and an analysis made of portions of this article, as prepared at four different manufactories. The result was, that the first quantity contained little more than two per cent. of water; but it contained also $6\frac{1}{2}$ per cent. of *carbonate of potass*. The second quantity contained only 9 4-10 per cent. of *hydriodate of potash*, with 16 1-10 of water, and 74 5-10 of potass. The third quantity also contained only 10 per cent. of the pure hydriodate. The fourth was the only pure specimen of them all. This last was obtained from the manufactory of Mr. Helm in London,—to which circumstance we would call the attention of all our importers of *materiæ medicæ*.

We propose, before long, to lay

before our readers a like exposition of the adulterations of other valuable and important medicines, which are purchased for pure articles of our apothecaries in this city, and doubtless supposed by them to be such.

COLLEGE OF PHARMACY.

SEVERAL druggists and apothecaries have for some time been associated under this title, for the purpose of educating young men intending to engage in the sale of drugs and medicines, in order to qualify them to judge of the articles and make up prescriptions correctly; and also with a view of preventing the dangerous frauds and adulterations which are daily practised. As specimens of these it is mentioned to us, that several pounds of an article, composed of rubbish and various roots, was not long since sold here as jalap, at the rate of six cents per pound. The price of the genuine article was then, at wholesale, forty-five cents. The roots of various inert, indigestible vegetables were powdered, mixed with tartar emetic, and the mixture sold for ipecacuanha. Calomel is mixed with white lead, and sold as pure. Common magnesia, powdered and sifted, is sold for calcined magnesia. Cream of tartar is mixed with plaster of Paris. When the price of arsenic was high, it was mixed with plaster of Paris in various proportions, and sold as genuine. Cayenne pepper is mixed with meal in various quantities, and colored to resemble the genuine. And so forth. Of the necessity of correcting these pernicious frauds there can be no doubt; and one of the most efficient means for so doing, is that adopted by the professional gentlemen who have formed this association.—*N. Y. Adv.*

Statistical Account of the State of Pharmacy in Paris.—A very curious document has just been published in Paris illustrative of

the state of Pharmacy in that city, apparently for the purpose of directing the attention of the French government to the necessity of relieving this class of tradesmen from the grievances to which their trade is subjected. It appears, according to the researches of the *French Statistical Society*, that, in Paris and its immediate vicinity, there are at present 285 pharmaceutical establishments, which employ, besides the owners, 465 persons, at wages varying from twelve and sixpence to thirty-seven shillings and sixpence a month,—that the whole capital invested in these concerns amounts to L.522,000,—that the gross proceeds are L.134,500,—and that, when the interest of capital and current expenses are deducted, there remains only about L.17,800 of clear profit. This is only L.62 for each establishment, and not quite so much as $3\frac{1}{2}$ per cent. on the capital embarked,—a most miserable result truly.

The document then proceeds to trace the causes of so low a profit in a trade usually considered lucrative; and assigns as the leading causes,—the absurd increase of persons in the trade,—the fraudulent assumption of the trade of apothecary by the druggist, grocer, herbalist, and even fruiterer, as well as the fraudulent application of his diploma by the retired apothecary,—the legal permission given to the grocer to sell 164 specific drugs among the most simple and common of them,—the sale of drugs at the hospitals, charitable institutions, and even religious establishments, by women and *Sœurs de la Charité*, who are able to drive the regular apothecary out of the market, as they have no rent, license, or servants to pay for,—the simplification of medical prescriptions by the improvements in modern physic,—and the operation of one of the old laws regarding the medical juries, which is not sufficiently explained to be intelligible by us.—*Edin. Med. and Surg. Journ.*

Ligature of the Internal Iliac.—

It is probably known to most of our readers, that the internal iliac was first tied for aneurism of the ischiatic artery by Dr. Stevens, of St. Croix, in 1812. The patient lived ten years after the operation. Mr. Lawrence, in his surgical lectures, recently expressed a doubt of the artery having been really tied in this instance. Dr. Stevens being in London at the time, sent the parts (which he had obtained on the death of the patient, and preserved in spirits), to the Royal College of Surgeons, where they were dissected, and the fact of the internal iliac having been tied fully established. The preparation exhibited the internal iliac artery converted into an impervious cord where the ligature was applied, and the remains of the aneurismal swelling on the ischiatic artery. Mr. Lawrence is said to have expressed himself as perfectly satisfied with the dissection.

Amer. Journ. of Med. Sciences.

Fissure and Spasmodic Constriction of the Anus.—

In our last volume, p. 248, we noticed the treatment of this affection, by M. Dupuytren, by means of the belladonna; and we find in our esteemed contemporary, the *Journal Générale*, for March last, a case of a very severe character, reported by Dr. Delaporte, in which the ointment of belladonna was used with the happiest effect, after many other measures had been tried without avail. The ointment was made by mixing one drachm of extract of belladonna with half an ounce of simple cerate. A roll of lint was smeared with this, and introduced into the rectum; the relief afforded was very prompt.

Another case is recorded by M. A. Laborderie, in the *Révue Médi-*

cale for July last, in which also this remedy was successful. M. L. added to his ointment half a drachm of the liquid acetate of lead.—*Ib.*

Extirpation of a Degenerated Parotid Gland.—

This operation was performed in January, 1829, by Dr. A. Magri. The tumor weighed two pounds and a half; its greatest circumference was fifteen inches, its smallest twelve inches. The excision was followed by paralysis of one side of the face. An account of the case has been published in the *Annali Universali di Medicina* for November and December, 1829, and a pretty full notice of it is contained in the *Révue Médicale* for March, 1830. There is nothing particularly interesting in the details.—*Ib.*

THE following gentlemen, members of the Boston Medical Association, have offered to perform, in behalf of said Association, the gratuitous vaccination of the poor so designated by the City Government:—

Drs. J. V. C. Smith, Hildreth, E. Warren, Robinson, Thomas, Howard, Lodge, Perry, Stearns, Ellis, Dyer, Davenport, Watson, Williams, Gregg, Greene, Bartlett, Strong, and Grigg.

The absence of solar influence still continues to affect the healthiness of the season.

By mistake, two short notices got into our last paper which had been given our readers a week or two previous.

Whole number of deaths in Boston the week ending December 10th, 18. Males, 11,—Females, 5. Stillborn, 2.

Of dropsy on the brain, 1—unknown, 2—infantile, 1—dropsy, 2—inflammation on the lungs, 2—fever, 1—old age, 1—consumption, 2—typhous fever, 1—lung fever, 1—teething, 1—inflammation in the bowels, 2.

ADVERTISEMENTS.

WILLIAMS ON DISEASES
OF THE LUNGS.

THIS day received, by CARTER & HENDEE, "A Rational Exposition of the Physical Signs of the Diseases of the Lungs and Pleura, illustrating their Pathology and facilitating their Diagnosis." By CHARLES J. B. WILLIAMS.
Dec. 6.

MEDICAL SCHOOL OF MAINE.

THE MEDICAL LECTURES AT BOWDOIN COLLEGE will commence on Monday, the twenty-first day of February, 1831.

Theory and Practice of Physic, by JOHN DELAMATER, M.D.

Anatomy and Surgery, by REUBEN D. MUSSEY, M.D., Professor at Dartmouth College.

Obstetrics, by JAMES McKEEN, M.D.

Chemistry and Materia Medica, by PARKER CLEAVELAND, M.D.

The ANATOMICAL CABINET is extensive, and constantly increasing.

The LIBRARY, already one of the most valuable Medical Libraries in the United States, is every year enriched by New Works, both foreign and domestic.

Every person, becoming a member of this Institution, is required to present satisfactory evidence that he possesses a good moral character.

The amount of fees for admission to all the Lectures is \$50. Graduating fees, including diploma, \$10. There is no Matriculating nor Library fee. The Lectures continue three months.

Degrees are conferred at the close of the Lecture term in May, and at the following Commencement of the College in September.

Boarding may be obtained in the Commons' Hall at a very reasonable price.

P. CLEAVELAND, Secretary.

Brunswick, Oct. 16, 1830. 4wep

NEURALGIC DISEASES.

A TREATISE on Neuralgic Diseases, dependent upon Irritation of the Spinal Marrow, and Ganglia of the Sympathetic Nerve. By THOMAS PRIDGIN

TEALE, Member of the Royal College of Surgeons in London, &c. Just received by CARTER & HENDEE. Nov. 2.

GERMAN LEECHES.

RICHARD A. NEWELL, Druggist, Summer Street, respectfully informs the Physicians and Public generally, that he has just received a fresh supply of the above-named *Leeches*, which will be sold at a fair price.

N. B.—Leeches sent to any part of the city, and applied, without extra charge, by day or by night. 6w—Nov. 8.

SURGICAL INSTRUMENTS
AND CHEMICALS.

STUDENTS in want of the above articles, would do well to call, before purchasing, at BREWER & BROTHERS', Nos. 90 and 92 Washington Street—Boston.

Oct. 15.

ep3m

ABERCROMBIE ON DISEASES
OF THE STOMACH.

JUST received by CARTER & HENDEE—Pathological and Practical Researches on Diseases of the Stomach, the Intestinal Canal, the Liver, and other Viscera of the Abdomen. By JOHN ABERCROMBIE, M.D., Fellow of the Royal College of Physicians of Edinburgh, &c., and first Physician to his Majesty in Scotland. Sept. 28.

SURGEON DENTIST'S MA-
NUAL.

JUST received, by CARTER & HENDEE, The Surgeon Dentist's Anatomical and Physiological Manual. By G. WAITE, Member of the Royal College of Surgeons. Nov. 2.

THE AMERICAN JOURNAL OF MEDICAL SCIENCES, No. 13, for November, 1830.—Just received by CARTER & HENDEE.

Published weekly, by JOHN COTTON, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for other newspapers.